LELAND (G. A.)

Recurrent Tonsillitis

With compliments of

BY

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RECURRENT TONSILLITIS.[1]

BY G. A. LELAND, M.D.

THE subject of recurrent tonsillitis is one which is forced upon the attention of the general practitioner often with distressing frequency; and the young physician, perhaps also the older one, is often disgusted at his inability to prevent it, or to really palliate it. From month to month, or perhaps more frequently, these tonsils come under observation, with all their annoyance and distress, not to say danger; and the efforts put forth for relief are all but powerless. The onset of the exacerbation may be sudden, ushered in by a chill more or less marked, with high fever, followed by more or less formidable swelling, with exudation, white or yellow patches, etc., to subside after a week or two; or it may go on to abscess, intratonsillar or peritonsillar, with great distress, forced starvation, restless days, sleepless nights, extreme prostration and anxiety (both for patient and physician), requiring weeks or months for recovery. The mental state of the attendant is not an enviable one when he knows that he may have a sudden fatal termination from extreme faucial swelling, œdema glottidis, suffocation from sudden discharge of pus, or by involvement of the great vessels, the carotid and internal jugular, by extension of inflammation.

In general, there are two varieties of tonsils which are subject to such recurrence. First, is the tonsil which in an inflammatory attack simply rounds out an increase in size — smooth, red, shiny, the parenchymatous variety. The crypts or lacunæ are not markedly developed, but the lymphoid elements are increased in

[1] Read before the Boston Society for Medical Observation, May 1, 1893.

size and in number (Virchow). If the capsule is broken and the finger introduced, a soft, friable feeling is communicated to it, something like that of the normal spleen. After several inflammatory attacks, these tonsils are adherent to the pillars of the fauces, and especially when this adhesion has taken place, are they apt to be permanently enlarged, and even to close the faucial passage pushing forward the uvula, with every slight cold, or disturbance of the digestion, or from some other ill-defined cause, so that the voice and respiration of the sufferer are much affected.

The other variety is the chronic tonsil, which has a hard, rubbery feel, whose surface is full of crypts or lacunæ which run into its depth from one-quarter of an inch to one inch or more, which crypts usually contain inspissated secretion of a cheesy consistency and of a most offensive odor. This is the "lacunal" tonsillitis of Wagner or Brown. It may be large enough to just project beyond the pillars or it may reach even to the uvula. Because of the diseased condition of the interior of the crypts, it is especially liable to frequent inflammatory attacks from even the slightest cause. It acts as a foreign body in the fauces, producing a tickling, hacking cough, giving a malodorous breath; and doubtless keeps the general health of the patient down from the absorption of these decomposing cheesy masses through the tonsil itself, or from their being swallowed. It is said that attacks of indigestion light up inflammatory conditions in the tonsil. It is probably also true that the contents of the crypts excite or keep up a fermentative indigestion. This variety of tonsil is doubtless the result of repeated inflammatory attacks of the first variety.

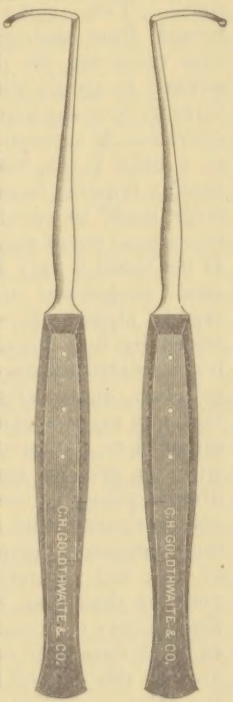
It has always seemed to the writer that the ordinary methods of treating these enlarged tonsils have been extremely futile; that advocates of sprays, washes, gargles and pigments applied to the surface of the ton-

sil have lost sight of the fact that the tonsil is an organ of considerable size covered by mucous membrane, and hence these applications can have scarcely any more effect than that of a counter-irritant, externally applied to have an influence over any internal organ. Brudenell Carter in his work on the eye, speaking of blepharitis, says, "When Sidney Smith saw a little girl patting the shell of a tortoise in order to please the animal, he told her that she might as well pat the dome of St. Paul's to please the dean and chapter." It seems just as rational and just as efficacious to apply remedies to the outside of these enlarged tonsils. Even excision of the tonsil except of the first variety, as usually practised, fails to reach the bottom of the crypts; and, although it is often done with great benefit, it may also be considered a sacrifice of science to expediency. The stumps will still contain more or less of the crypts in this diseased condition, and if the stumps do not atrophy, as they commonly do not, the pillars of the fauces are still widely separated impairing the flexibility of articulation. But if the crypts themselves can be treated so that their contents will not remain to excite frequent inflammation, the tonsils will subside into a quiescent state and shrink to a small size, provided the fibrous elements have not been so largely increased as to interfere with shrinking. Hence about ten or twelve years ago, a suggestion found, I think, in a French medical journal promised to be a step in the right direction. This suggestion was that a syringe with a long nozzle bent at right angles an inch from the extremity, could be used to remove the decomposing matter from the lacunæ, and that then the tonsil would shrink away having lost the exciting causes of inflammation. I, therefore, had this syringe made and used it for a couple of years assiduously; but as it did not seem to meet the indications satisfactorily, or quickly enough, it has been used

less and less in favor of a method which I saw mentioned some eight years ago, and which McBride says was advocated by Hoffmann, namely, the tearing away of the partitions between the crypts, so as to connect the many small contracted mouths into a few large, wide open ones.

As is well known, a tonsil which has suffered many attacks may have a surface more or less reticulated by fibrous bands between which are small holes which lead into crypts which are often large enough to contain many cheesy pellets; or the mucous membrane of the surface may be fibrous and tough. It is probably true that the septic contents of a crypt, acting as a foreign body, may start up an inflammatory attack which will close the mouth and so produce an abscess cavity, and this seems to be a rational explanation of recurrent abscess of the tonsil. Or the septic matter may be absorbed into the lymph spaces in the connective-tissue outside of and around the tonsil, and produce the peritonsillar abscess. Now, in the chronic variety of these tonsils these crypts can be united so as to form large mouths which will readily allow their contents to pour into the throat before they have become diseased. The introduction of caustics or the actual cautery into the crypts does not seem, at least in my hands, to accomplish the same result. First, because the application is a good deal wasted upon the contents of the crypts, since it is difficult and tedious to completely empty them; and, second, because it may not reach their farthest depth, and the inflammatory products produced by the application have the same small hole to get out of, or nearly the same, as before. Doubtless, however, good results are obtained in this way, although I think there is more discomfort to the patient, and less ease and facility on the part of the surgeon, than in Hoffmann's method. His blunt hook was used by the writer for a number of years,

but cases were encountered where the tonsil was too tough to be easily torn by a blunt instrument. The idea then suggested itself that the inner edge might be made sharp, and that thus the instrument might be much more effectual and the operation more nearly painless. It was then that these knives were made by Goldthwaite & Co., at my suggestion, and I have treated this variety of tonsils for several years with them with the greatest comfort to myself and with the least discomfort to the patient. Gampert has lately called attention to this method, which he calls "decission of the tonsils." He also observes that many follicles communicate, and if the fistulous tracts be incised, the cicatrization occurs as in similar passages.



It is well known that the tonsil is not very sensitive, and I have often used this knife without the patient being aware that I was doing any cutting. The method is simply as follows: The olive-shaped tip of the knife is introduced into a crypt in the upper part of the tonsil, and then turned downward and inward and made to come out by another in the lower part. The substance of the organ between these two holes is then cut through. This can be repeated from three to ten times at a sitting until the surface of the tonsil presents the appearance of being full of slits. There is usually not

much hæmorrhage, and this knife can be introduced oftentimes to its fullest extent without danger. As soon as the bleeding has ceased, the slits are painted with Monsel's solution, or with a mixture of glycerine and tincture of iodine in equal parts. These solutions may be put upon the end of the cotton-wrapped bent applicator and crowded down to the bottom of the tonsil. This is done for antisepsis, and to prevent the wounds from uniting immediately as they tend to do, thus rendering the operation futile. The patient is advised to gargle with hot water very frequently for three or four days, and to return in a week for another operation, if necessary. Dobell's or Seiler's solution, or a little borax, may be added to the hot water. It usually requires from four to eight sittings to cause a large tonsil to recede from the median line to a position almost out of sight behind the pillars of the fauces. If the tonsil is very fibrous and hard there will be left small projections upon the surface. These can be readily nipped off with adenoidal forceps or can be seized by long dressing-forceps and removed with a blunt-pointed bistoury. The patient is then instructed to return on the slightest symptom of the old trouble, that any crypt which has escaped treatment may be attended to. In adults this method can be carried out with the greatest facility and ease, and often in children as young as ten years of age. I have also been able to operate with satisfaction, although with a little more necessary persuasion, in children as young as five or six; and recurrent tonsillitis is not apt to occur younger than that, at least in my experience. The first variety of tonsillitis, in which the crypts are not so much developed or so fully diseased, is much benefited by this method if the capsule is torn or cut and the solution applied to its interior, and perhaps even if only adhesions between the tonsil and the pillars of the fauces are cut away by this method. It has been

said by some one, whose name I have forgotten, that these adhesions can be removed by the galvano-cautery flat knife. I have tried this on one or two cases, only to give it up because of the pain of the application and the extreme soreness of the throat afterward. By the use of this knife, however, the pain of the operation is comparatively insignificant; and, although the tonsil may be sore for a day or two, it is not so sore as to give the patient great inconvenience. Oftentimes the patient returns, and says that the throat has not been sore at all; but, of course, in this, as in many other things, there are various degrees of complaining.

In Lennox Browne's third edition, in speaking of "Chronic Inflammation of Tonsils," he says: "Treatment of chronic lacunar disease is very tedious and unsatisfactory when the tonsils are not hypertrophied. It has been proposed to squeeze out the cheesy secretion from each diseased crypt, and then to apply solid nitrate of silver or other caustics — preferably the galvano-cautery if available — to the cavity. Such measures are, however, but too frequently only tentative, and not of permanent benefit. It is better to treat such cases on general principles, according to the diathesis and to give guiacum or chlorate-of-potash lozenges. Whenever (as is almost certain to occur in these cases) active inflammation causing enlargement takes place, it is to be rather encouraged than arrested, and the gland then removed." He says he has frequently pursued this plan with the most satisfactory results; but it is in just these cases that the method of Hoffmann finds the happiest application. Often the inflammatory attacks are not extensive enough to produce an enlargement of sufficient size to be seized by the guillotine; and at all times, preferably when there is no inflammatory engorgement, the little crypts can be entered by these olive-pointed right-angled knives, their mouths enlarged or united, and the cavities shaped

so that they cannot retain their easily decomposing secretion. There are often seen cases, where the tonsils are of minimum size, where only two or three crypts are chronically diseased, but where these cause the patient frequent discomfort, annoyance or alarm. It would be tedious indeed to wait until they were large enough to be guillotined.

The following illustrative cases may bring out some points that have not been touched upon in the foregoing, and emphasize others:

Case I. Miss M. G., a lady of thirty summers or thereabouts, was sent to me on the 24th of August, 1889, for an earache which had been coming on for a day or two. Examination of the ear showed no congestion or bulging, denoting inflammation or effusion into the tympanum; and I told her, therefore, that probably the pain in the ear was reflex from some other cause, very likely from the throat. On inquiry, she said that she had a little sore throat at the present time, that she had been subject to recurrent attacks of tonsillitis for four or more winters, that during every winter a slight cold would start up an attack of tonsillitis, which would last from four to six weeks, including recovery. As she was much in society, these attacks of tonsillitis interfered very much with her winter's pleasure since a slight cold taken while out of an evening meant being housed for a month or more. During these winters constant treatment with gargles, sprays and applications gave no lasting benefit. These attacks occurred also in the summer, but with less frequency; the ears were apt to feel full and to itch a good deal. Examination of the throat showed both tonsils very much enlarged, surfaces pitted with holes, through which projected the tops of the inspissated secretion filling them. The left tonsil at this visit was red and swollen, as if taking on a slight degree of inflammation. I introduced the blunt hook

and tore away the partitions between several of the crypts, expelling much of their contents, and causing a little depletion by hæmorrhage, and then washed them out with Dobell's solution by means of the long-nozzled syringe. She expressed herself as immediately relieved of the earache, and continued her journey to a summer resort. As she was in transit, I was unable to do very much of an operation and was content to simply relieve the discomfort in the ear. She experienced this relief for some time, but soon after had a large swelling come on the left side of the neck, which was very painful and was accompanied with considerable fever and malaise. The resident physician at the resort could see no reason for it on examination of the throat, and had to await developments. Finally, an abscess burst, probably in the under part of the tonsil, out of sight, and the physician could not find the opening, but much blood and pus were discharged for three or four days. This produced a great deal of physical depression, and the patient was quite a long time in recuperating. On October 16th, I again examined the throat and was able to find no lesion to account for the abscess or its place of exit. Having determined to have her tonsils reduced by the method in question, I united several of the crypts at this sitting, and painted with equal parts of tincture of iodine and glycerine. She remarked that her ears felt very well until the day before, but she then began to feel the old irritation return. This operation was repeated on October 26th and November 14th, when some of the little light-colored, fibrous-feeling tips were cut off with the bistoury. By this time with these four operations, the tonsils, which at first projected perhaps half-way to the uvula, had shrunk down to the level of the pillars of the fauces. February 20 and 24, 1890, I again saw her with a very severe cold, but no trouble at all with the tonsils. On May 19th, she had a very mild

attack of inflammation of the fauces and naso-pharynx from a cold which occluded the left nostril, and the tonsils were somewhat involved in the inflammation. The few crypts remaining were brought into notice by the inflammation. They were torn and cut again and a few projections removed. This was repeated on May 29th and June 3d, which last operation was for trimming up, and a few little holes were enlarged and again painted. At the end of the summer I saw her again for a slight cold which she had in the head, but she had had no symptoms of tonsillitis throughout the summer. In January of 1891, tonsillitis was very common, almost epidemic, and her right tonsil was seared a little on the 14th of the month with the galvano-cautery point in order to treat a very small point of local redness. Since that time she has had no trouble at all with her throat. I saw her about a year ago, the tonsils had disappeared behind the pillars of the fauces, and in looking at her throat one would never suspect that they had ever been enlarged. This then is the fourth winter since her tonsils were operated upon, and from being formerly laid up several times in the winter with this recurrent disease, she has had absolute immunity from it, and I have no reason to doubt that it will be permanent.

Case II. Mr. P. J., seventeen years of age, was sent to me October 31, 1889, by the foregoing case who was a relative. On the sixth and seventh year before, he had been much troubled with attacks of tonsillitis, but they were not very severe. The tonsils were very large, especially the left one, projecting even to the uvula, the surfaces studded with the mouths of crypts, and bands of fibrous tissue reticulated over their surfaces. They interfered very much with speech, especially with singing and together with a few adenoid vegetations in the naso-pharynx, interfered also very much with breathing. Five years before he had had

an acute inflammation of the left ear with rupture of the membranum tympanum and hearing was variable, sometimes much impaired, with colds. He submitted very gracefully to the operation in question, and by the last of December, after seven sittings, the tonsils had disappeared behind the pillars of the fauces, the pillars themselves had come together so as to be in their usual position, and his voice, color, flesh and general health were very much improved. In this case the parents were averse to the amputation of the tonsils with the guillotine, and were pleased to think that they could be reduced in another way which did not seem so barbarous. A letter from his mother, received last week, says: "He has gained much in flesh and color; his general health has improved; and he has had no further trouble with the throat, which formerly caused him to lose much time from his studies."

The following case is interesting because an intra-tonsillar abscess:

Case III. Miss C., a lady in good circumstances, and of about thirty-two summers, had from a child been troubled with very severe ulcerated throats which continued till she was about twenty-seven, when they took on the added evil of abscess formation. The first attack was double, one on each side, eleven years ago. She never had more than one attack per year except once when the second attack occurred in January, but was much lighter than the May attack. The regular attacks occurred in May and in *every* May. Three weeks were usually required before the abscess broke, and two more before she was able to sit up a moment; and usually four months before she recovered her usual tone; and then it was time to look forward to another attack. Each attack was followed by one of acute rheumatism. I saw her about three years ago, with Dr. Bush, at the height of the attack. I was unable to reach pus with the curved bistoury; and I think I

have never, before nor since, seen so much suffering in such an attack.

In the fall, after recuperation, the method of treatment under discussion was employed by me and she was seen about the usual number of times, and the tonsils shrank away very satisfactorily. The next May was to test the result. On the 31st day at noon, she appeared at my office, just twenty-three months ago, saying that the old trouble was again upon her. One small red nodule appeared in the centre of the right tonsil. It was incised, and a small amount of greenish pus exuded. She went home relieved, only to call me again at about nine o'clock for increasing pain and fever, chilliness, headache, and in general, the old symptoms. A small amount of pus showed at the site of the puncture, and the hole was enlarged. With her reluctant permission, I introduced the tip of my right digit into the mouth, and finding the incision, pushed it into the tonsil where was found a cavity whose wall felt like the inside of a rubber ball. The opening was torn very wide on withdrawing the finger. The pain was very severe, and bravely borne. She was sure she would be ill as usual the next morning, but at my call, was up and about, dusting the parlor, after a quiet, painless, restful night.

Since then she has had no tonsillar trouble, and only one slight sore throat. Her general health is much improved; she has much less rheumatism; and has noticed the better sound and flexibility of the voice, and absence of fatigue in its use. From being constantly debilitated, she is now in robust health.[2]

Case IV. Mrs. A. P., (twenty-seven, married, with several children) has had tonsillitis and an irritable sore throat (but never quinsy, so-called, or tonsil-

[2] Since the foregoing was prepared for publication, the patient came in June 3d to say that the second May had already passed, and that she had escaped all symptoms of throat trouble, and, therefore, was entirely satisfied that the treatment had been a success.

lar abscess) for eleven years; never was free from a sore throat summer nor winter, always worse in winter; her voice was much affected, both for talking and singing, and singing was entirely given up on account of it; general health was much impaired and weight was only from ninety to one hundred and nine pounds, although according to her stature she ought to have weighed over one hundred and twenty; complained very much of trouble with breathing while asleep and frequently had to moisten mouth with some gargle or drink which was constantly kept by the bedside; had constant dropping down the throat and malodorous breath, but had no trouble with ears and no dyspepsia, rheumatism, nor gout; had diphtheria nine years ago and thinks throat has been aggravated very much since.

On examination, the tonsils were found to be moderately enlarged, surface perforated by crypts containing more or less cheesy, decomposing secretion; nasopharynx reddened and somewhat thick, markedly so at the lymphatic patches behind the posterior pillars. There were a few small adenoids in the vault. She submitted at the first visit, October 31, 1890, to the operation in question upon the left tonsil, and a number of pieces were removed with the forceps and bistoury. A weak solution of borax, as hot as could be borne, was ordered for gargle. She was also operated upon on the 7th, 14th and 21st of November, and a few adenoids were at the same time removed with the forceps. She did not suffer much between the visits, and having a good deal of "sand" was obliged to submit to but four operations in all. The tonsils shrank away entirely between the pillars of the fauces, and she was dismissed with the recommendation to come again should a single follicle start up to be inflamed, and give her any idea that the old symptoms were returning. I have not seen her since; but a letter dated

April 26th of the current year says that she has had no symptoms of a sore throat since the treatment was finished, nor of catarrh; that she has had no odor of the breath and not a sick day since; that she can talk and sing as well as ever; and that her general health has improved, and her weight is now between one hundred and twenty-five and one hundred and thirty pounds. It is not to be expected that she will ever be troubled again.

Case V. A little girl, G. H., seven years of age, has had trouble with adenoids and tonsils since birth. At two years of age she had scarlet fever and the throat has been very sensitive and tonsils very troublesome ever since. At the first visit, December 7, 1892, she was just recovering from the fourth attack of tonsillitis during that year. There were two attacks the previous winter, one in the summer and one the first week in September, and the day before the visit she was out for the first time since another attack. This last time the tonsils were enlarged for two weeks, and painting with iron, etc., was not of much avail until eight days ago the attack culminated in an acute tonsillitis. Under the care of another practitioner she had been kept along, and the naso-pharyngeal hyperplasia had satisfactorily diminished as she advanced in age, but she has had on the average about four attacks of acute tonsillitis every year. Being so young it was thought advisable to do but little at each operation, but in this case the parents were glad to find a method which would not require tonsillectomy. She submitted to seven operations only, which were considered sufficient, for the tonsils had shrunk well away, although the surfaces were slightly nodular. She went away with the ordinary injunction as to the return of the inflammation in even a single follicle; and on February 10th (the last operation occurring on the 26th of January), on a very rainy and stormy day, I was sent

for in a hurry because it was thought the tonsils had again lighted up; but at my visit I found the child playing about apparently perfectly well, with no sore throat. The parents had been frightened because she had awakened that morning a little languid, as usual in such attacks, and they had seen some redness about the fauces, and thought that my prognosis was refuted. I was very happy to assure them that, although the fauces were slightly reddened, the tonsils were not affected at all, and that there was no cause for alarm.

She has gone through this very trying spring, when sore throats have been more than usually prevalent, without another attack.

Of course, I do not consider this case as one which is of as much importance as the others which have been longer finished; but I report it as one which, under the old methods of treatment, for five years at least has still had four attacks of "quinsy sore throat" every year, and which in a most trying season since operation has thus far escaped; and I am almost willing to wager she will have continued immunity from her old enemy.

It would be useless to continue to enumerate cases which have been benefited, since their relation would be believed by some and disbelieved by others, as is often the case; but these few are cited as examples of the beneficial effect of a treatment which I am persuaded is not in common use among physicians, both general and special. This method is not brought forward as the best in all cases, but in those cases where the tonsils are too small to reach with the guillotine; in those where there are but a few diseased crypts; in tonsils which perhaps are not enlarged at all, it is of the greatest value, at least in my hands. It is advocated as a very good method where, as is so often the case, the patients or their parents are much averse to the amputation of the organs; and certainly, in my

experience at least, when this method is carried out to a satisfactory termination, the stump left is much better than by any other method. I do not claim any originality in bringing it forward except that perhaps these knives, which I have not seen described nor recommended before, I think are an improvement over the blunt hook of Hoffmann, which certainly gives a great deal of pain where the tonsils are toughened by fibrous hyperplasia.

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